

1      **CLAIMS**

2      1. A method comprising:

3              determining, from program data for an electronic program guide, whether a  
4              program is in letterbox format; and

5              upon request for a program determined as being in letterbox format,  
6              converting the program to anamorphic format prior to outputting the program to a  
7              television.

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9      2. A method as recited in claim 1, wherein the determining comprises  
10        evaluating a format flag associated with the program.

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12      3. A method as recited in claim 1, wherein the converting comprises  
13        vertically stretching the program by a ratio of 4/3.

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15      4. A method as recited in claim 1, wherein the converting comprises  
16        vertically stretching the program by a ratio of  $M/N$ , where  $M > N$ .

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18      5. A method as recited in claim 1, wherein the converting comprises  
19        using multiple polyphase filters to resample the program.

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21      6. A method as recited in claim 1, further comprising receiving the  
22        program data as part of a broadcast feed.

1       7. A method for operating a client device that interfaces a television  
2 with a television network, comprising:

3           receiving a viewer request for a program;

4           examining program data in an electronic program guide executing at the  
5 client device to ascertain whether the program requested by the viewer is in  
6 letterbox format;

7           determining whether the television is capable of supporting anamorphic  
8 programs; and

9           in an event that the program is in letterbox format and the television is  
10 capable of supporting anamorphic programs, converting the program from the  
11 letterbox format to anamorphic format prior to output to the television.

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13       8. A method as recited in claim 7, wherein the examining comprises  
14 checking a format field in the program data to identify whether programs are  
15 marked as being anamorphic.

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17       9. A method as recited in claim 7, wherein the determining comprises  
18 ascertaining from user settings whether the television is capable of supporting  
19 anamorphic programs.

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21       10. A method as recited in claim 7, wherein the converting comprises  
22 vertically stretching the program by a ratio of 4/3.

1       **11.** A method as recited in claim 7, wherein the converting comprises  
2 vertically stretching the program by a ratio of M/N, where M > N.

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4       **12.** A method as recited in claim 7, wherein the converting comprises  
5 using multiple polyphase filters to resample the program.

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7       **13.** A method as recited in claim 7, further comprising receiving the  
8 program data as part of a broadcast feed.

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10      **14.** A computer-readable medium comprising computer-executable  
11 instructions that, when executed, direct a client device to:

12        evaluate electronic program guide (EPG) data to discern whether a program  
13 is in letterbox format; and

14        convert the program from the letterbox format to anamorphic format prior  
15 to outputting the program to a television.

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17      **15.** A computer-readable medium as recited in claim 14, further  
18 comprising computer-executable instructions that, when executed, direct a client  
19 device to vertically stretch the program by a ratio of 4/3.

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21      **16.** A computer-readable medium as recited in claim 14, further  
22 comprising computer-executable instructions that, when executed, direct a client  
23 device to vertically stretch the program by a ratio of M/N, where M > N.

1           **17.** A client device, comprising:  
2            a memory;  
3            a processor coupled to the memory;  
4            an electronic program guide (EPG) stored in the memory and executed on  
5            the processor to organize and present program data relating to programs, the  
6            program data including information identifying whether programs are in letterbox  
7            format; and

8                    a letterbox-to-anamorphic converter to convert a program identified by the  
9            EPG to be in letterbox format into an anamorphic program in anamorphic format  
10           for output to a television display.

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12           **18.** A client device as recited in claim 17, wherein the letterbox-to-  
13           anamorphic converter is configured to vertically stretch the program by a ratio of  
14           4/3.

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16           **19.** A client device as recited in claim 17, wherein the letterbox-to-  
17           anamorphic converter is configured to vertically stretch the program by a ratio of  
18           M/N, where M > N.

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20           **20.** A client device as recited in claim 17, wherein the letterbox-to-  
21           anamorphic converter comprises a resampler to produce M/N times as many  
22           output samples from input samples, where M > N.

1       **21.** A client device as recited in claim 17, wherein the letterbox-to-  
2 anamorphic converter comprises a polyphase resampler with multiple polyphase  
3 filters.

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5       **22.** A client device as recited in claim 17, wherein the letterbox-to-  
6 anamorphic converter comprises:

7           a factor-of- $M$  interpolator to produce  $M$  times more samples than were  
8 input to the converter;

9           a low pass filter to filter the samples; and

10          a factor-of- $N$  decimator to reduce the number of samples by a factor of  $N$ ,  
11 thereby producing  $M/N$  times as many output samples as were input to the  
12 converter.

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14       **23.** A client device as recited in claim 22, wherein the low pass filter  
15 comprises multiple polyphase filters.

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17       **24.** A system for use with a television capable of supporting anamorphic  
18 programs, comprising:

19           program guide means for examining electronic program guide data to  
20 ascertain whether a program is in letterbox format; and

21           conversion means for converting the program from the letterbox format to  
22 anamorphic format prior to output to the television.

1           **25.** A system as recited in claim 24, wherein the conversion means  
2 comprises means for vertically stretching the program by a ratio of 4/3.

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4           **26.** A system as recited in claim 24, wherein the conversion means  
5 comprises means for vertically stretching the program by a ratio of M/N, where M  
6 > N.

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8           **27.** A system as recited in claim 24, wherein the conversion means  
9 comprises resampling means for resampling the program to produce M/N times  
10 more output samples than input samples, where M > N.

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